PRIOR ART

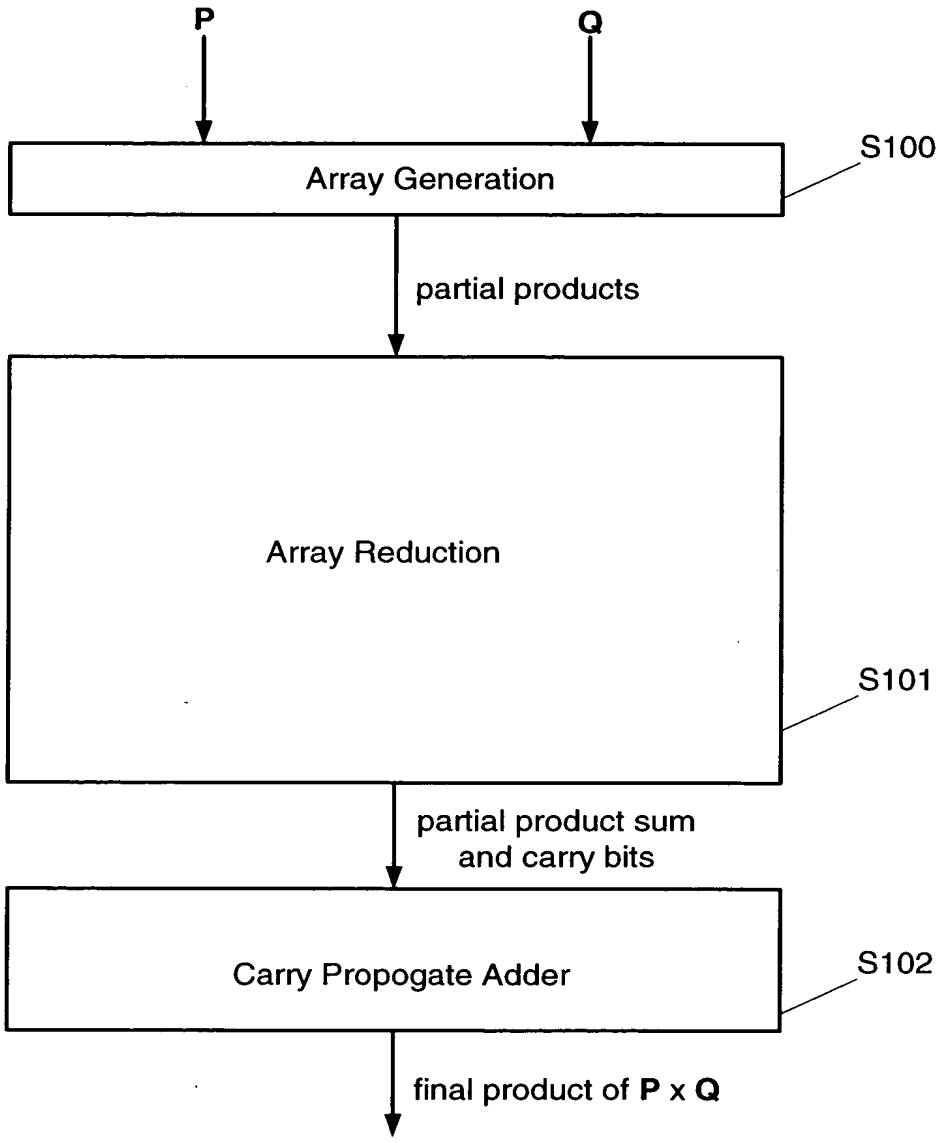

Figure 1

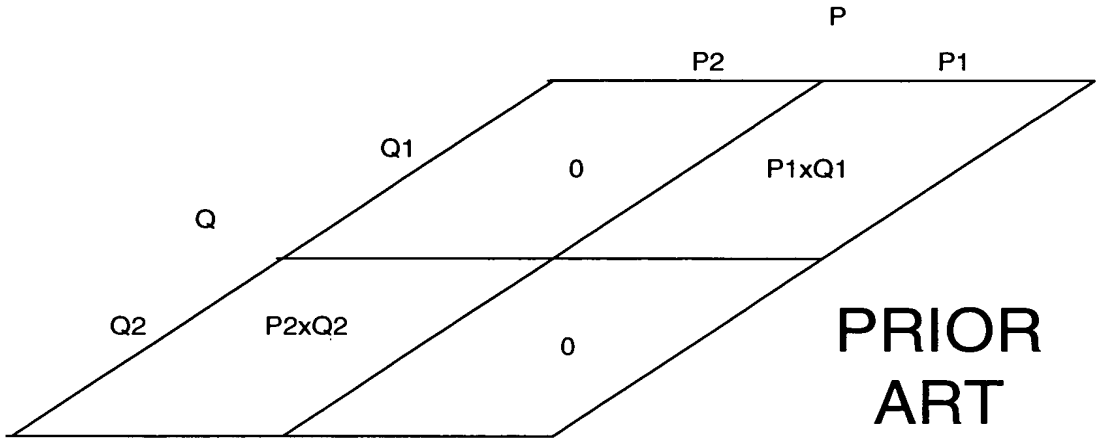

Figure 2

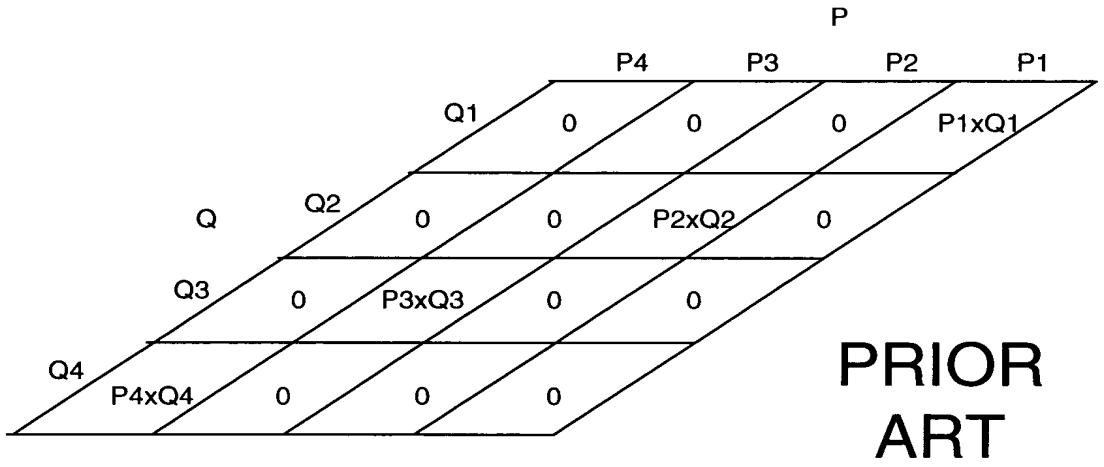

Figure 3

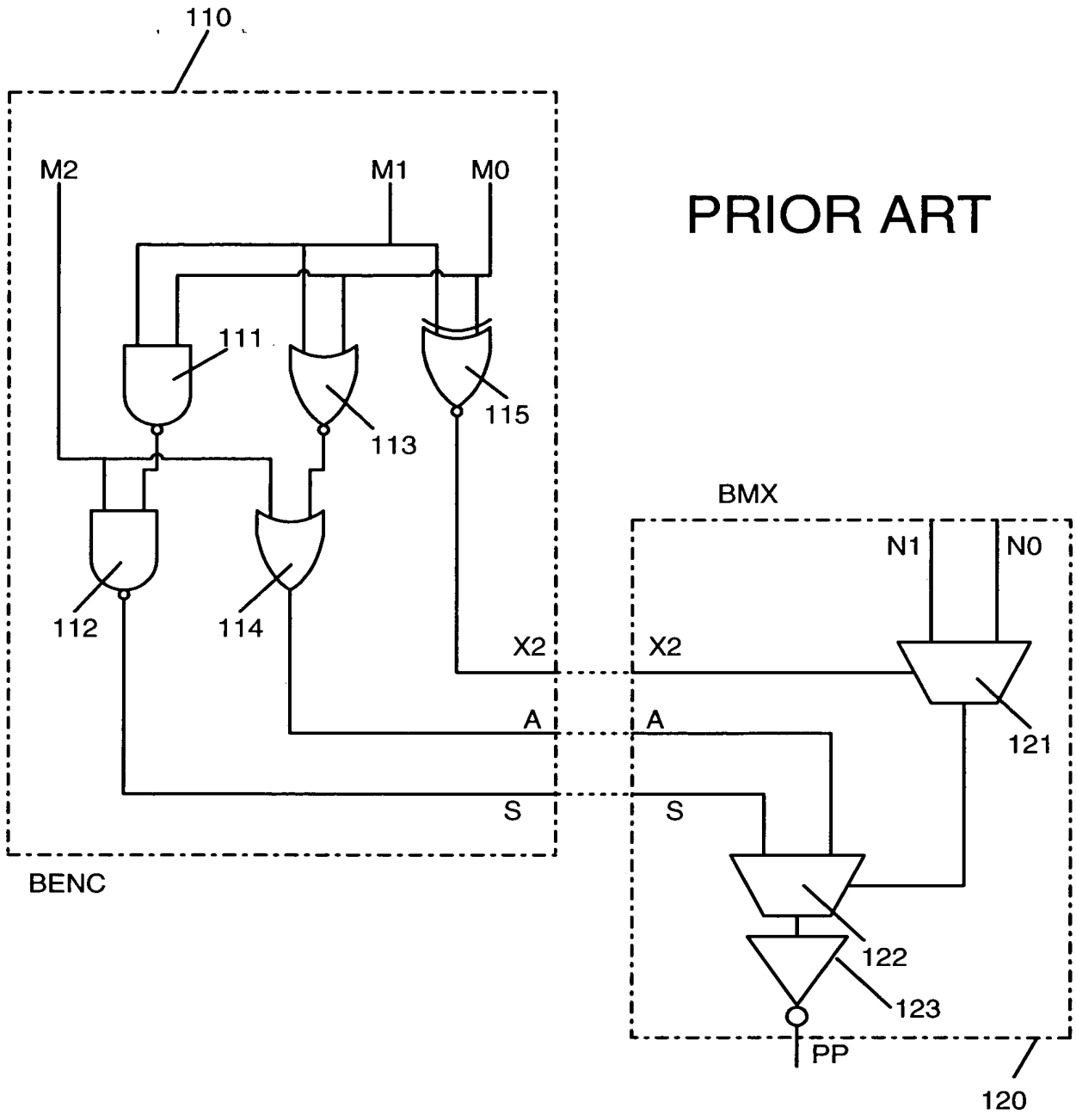
110
M2
M1
M0
PRIOR ART
111
113
115
112
114
BENC
BMX
N1
N0
X2
X2
A
A
S
S
121
122
123
PP
120

Figure 4

PRIOR ART

M2	M1	M0	Action	A	S	X2	BMX output
0	0	0	multiply by 0	1	1	1	**0**
0	0	1	multiply by 1	0	1	0	**N1**
0	1	0	multiply by 1	0	1	0	**N1**
0	1	1	multiply by 2	0	1	1	**N0**
1	0	0	multiply by -2	1	0	1	**¬N0**
1	0	1	multiply by -1	1	0	0	**¬N1**
1	1	0	multiply by -1	1	0	0	**¬N1**
1	1	1	multiply by 0	1	1	1	**0**

Figure 5

PRIOR ART

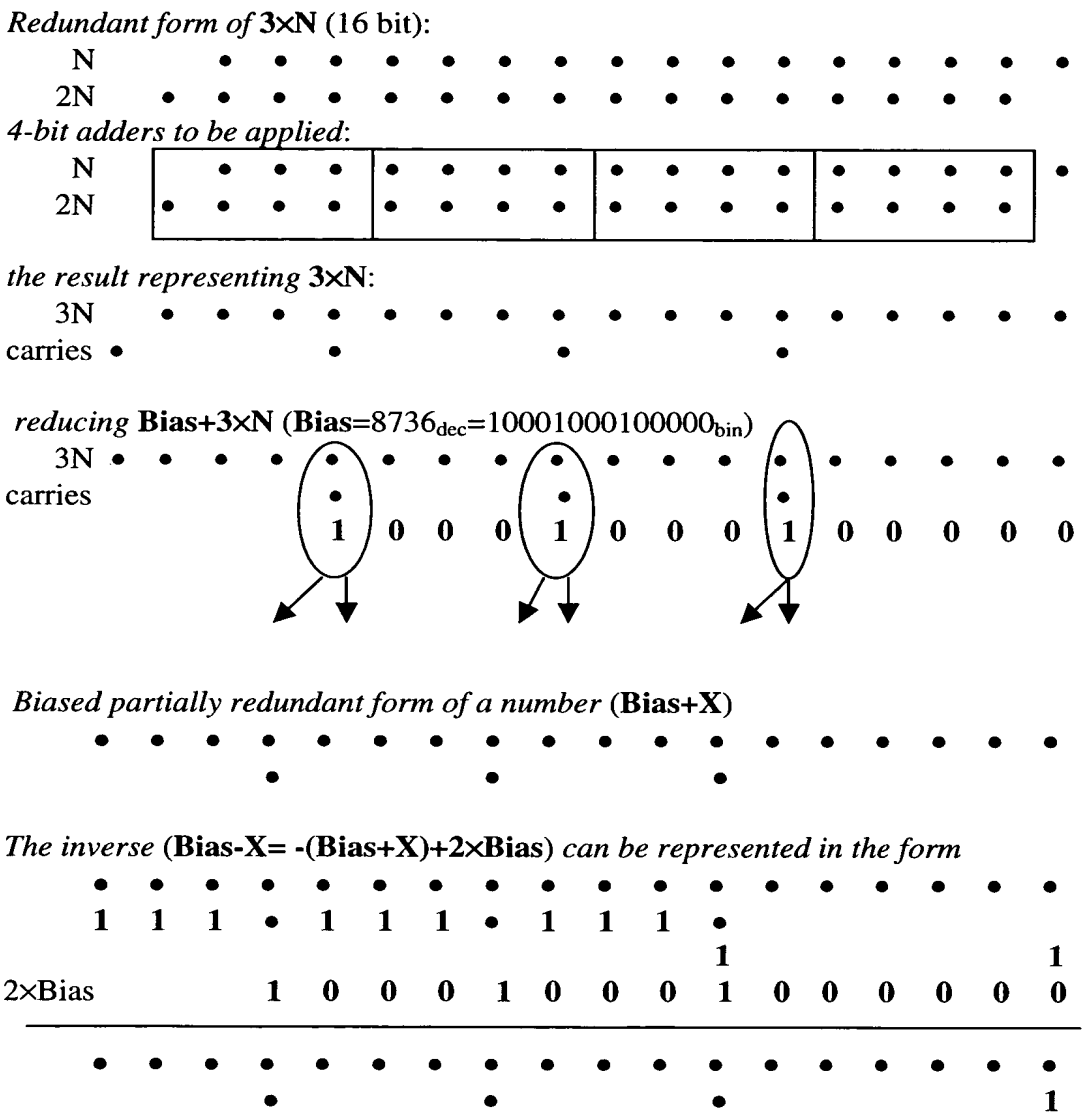

Figure 6

PRIOR ART

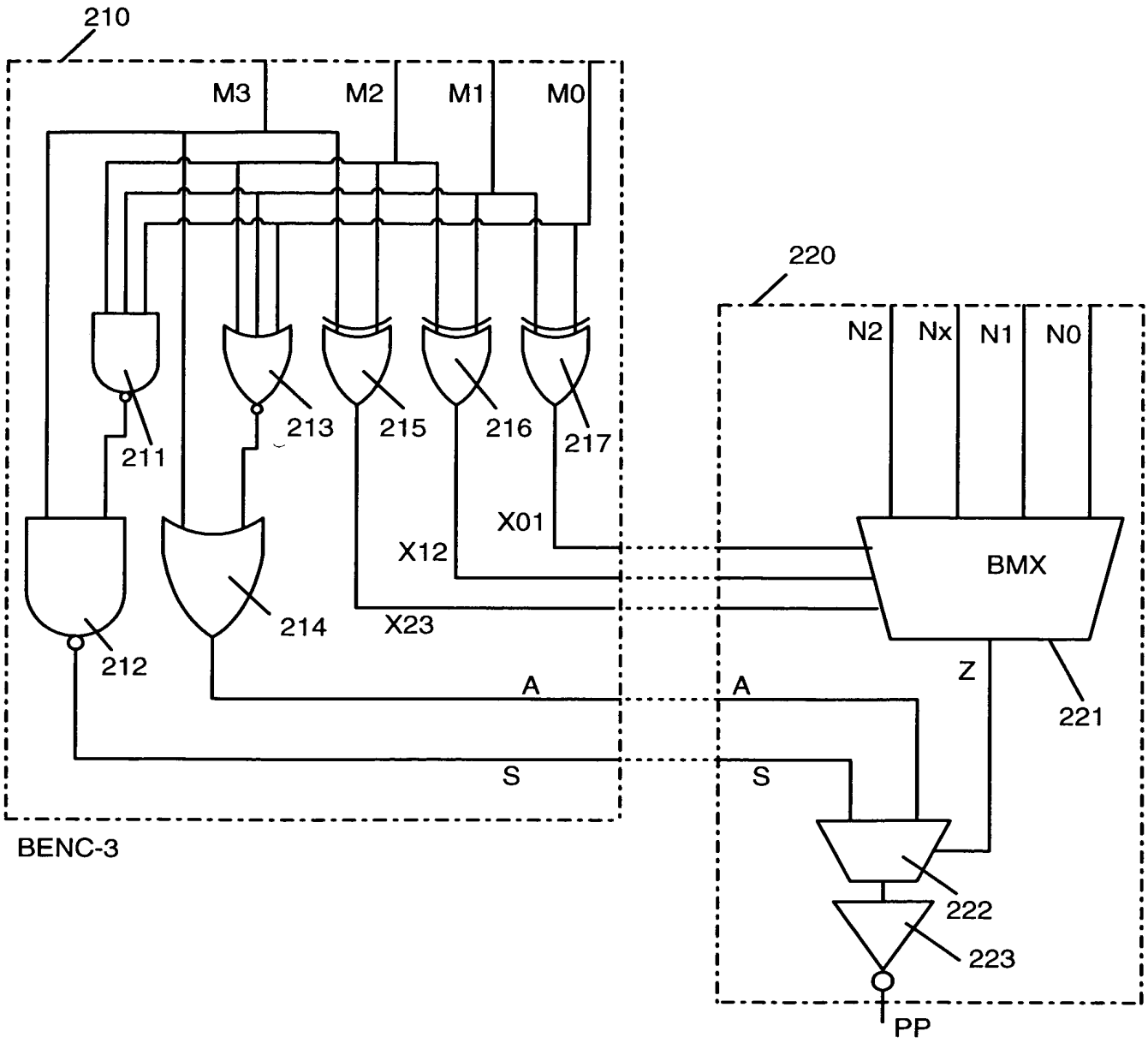

Figure 7

PRIOR ART

M3	M2	M1	M0	Action	BMX output	A	S	X01	X12	X23
0	0	0	0	multiply by 0	**0**	1	1	0	0	0
0	0	0	1	multiply by 1	**N2**	0	1	1	0	0
0	0	1	0	multiply by 1	**N2**	0	1	1	1	0
0	0	1	1	multiply by 2	**N1**	0	1	0	1	0
0	1	0	0	multiply by 2	**N1**	0	1	0	1	1
0	1	0	1	multiply by 3	**Nx**	0	1	1	1	1
0	1	1	0	multiply by 3	**Nx**	0	1	1	0	1
0	1	1	1	multiply by 4	**N0**	0	1	0	0	1
1	0	0	0	multiply by -4	**¬N0**	1	0	0	0	1
1	0	0	1	multiply by -3	**¬Nx**	1	0	1	0	1
1	0	1	0	multiply by -3	**¬Nx**	1	0	1	1	1
1	0	1	1	multiply by -2	**¬N1**	1	0	0	1	1
1	1	0	0	multiply by -2	**¬N1**	1	0	0	1	0
1	1	0	1	multiply by -1	**¬N2**	1	0	1	1	0
1	1	1	0	multiply by -1	**¬N2**	1	0	1	0	0
1	1	1	1	multiply by 0	**0**	1	1	0	0	0

Figure 8

PRIOR ART

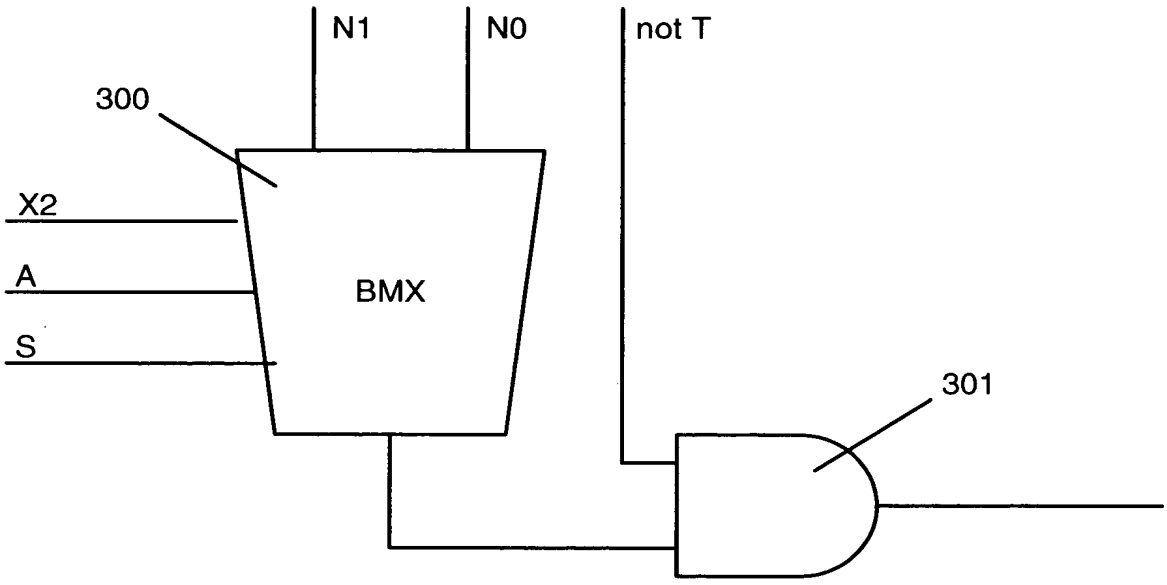

Figure 9a

PRIOR ART

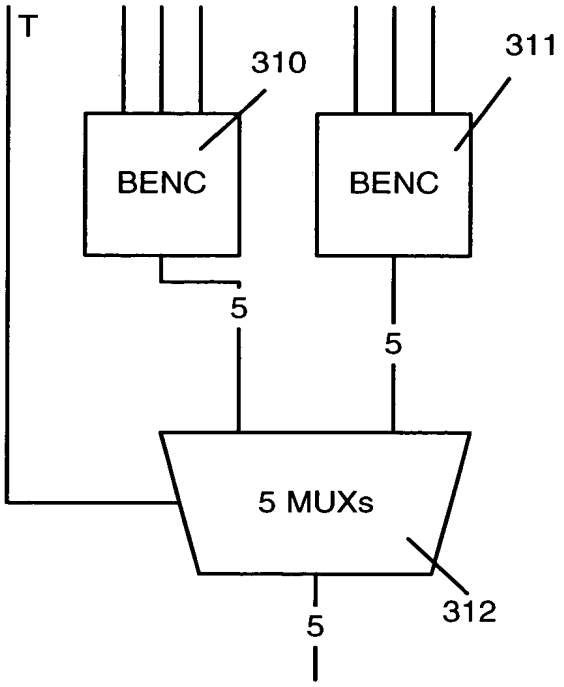

Figure 9b

PRIOR ART

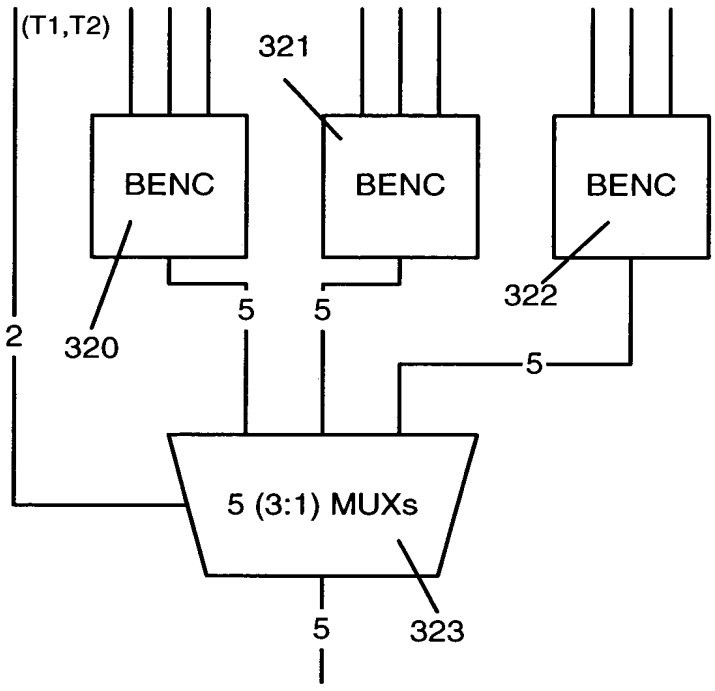

Figure 9c

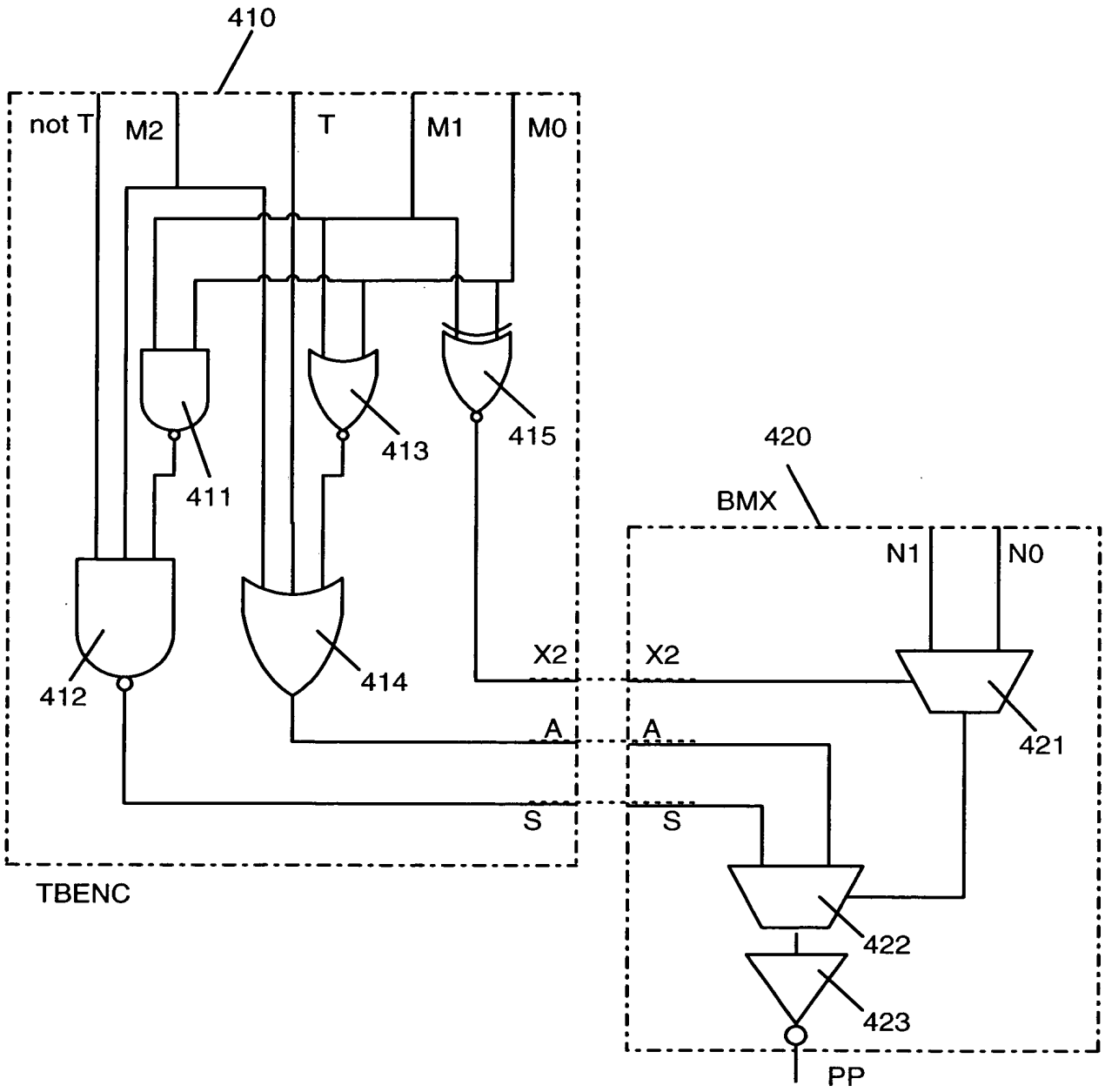
410
not T
M2
T
M1
M0
411
413
415
412
414
X2
A
S
TBENC
420
BMX
N1
N0
X2
A
S
421
422
423
PP

Figure 10

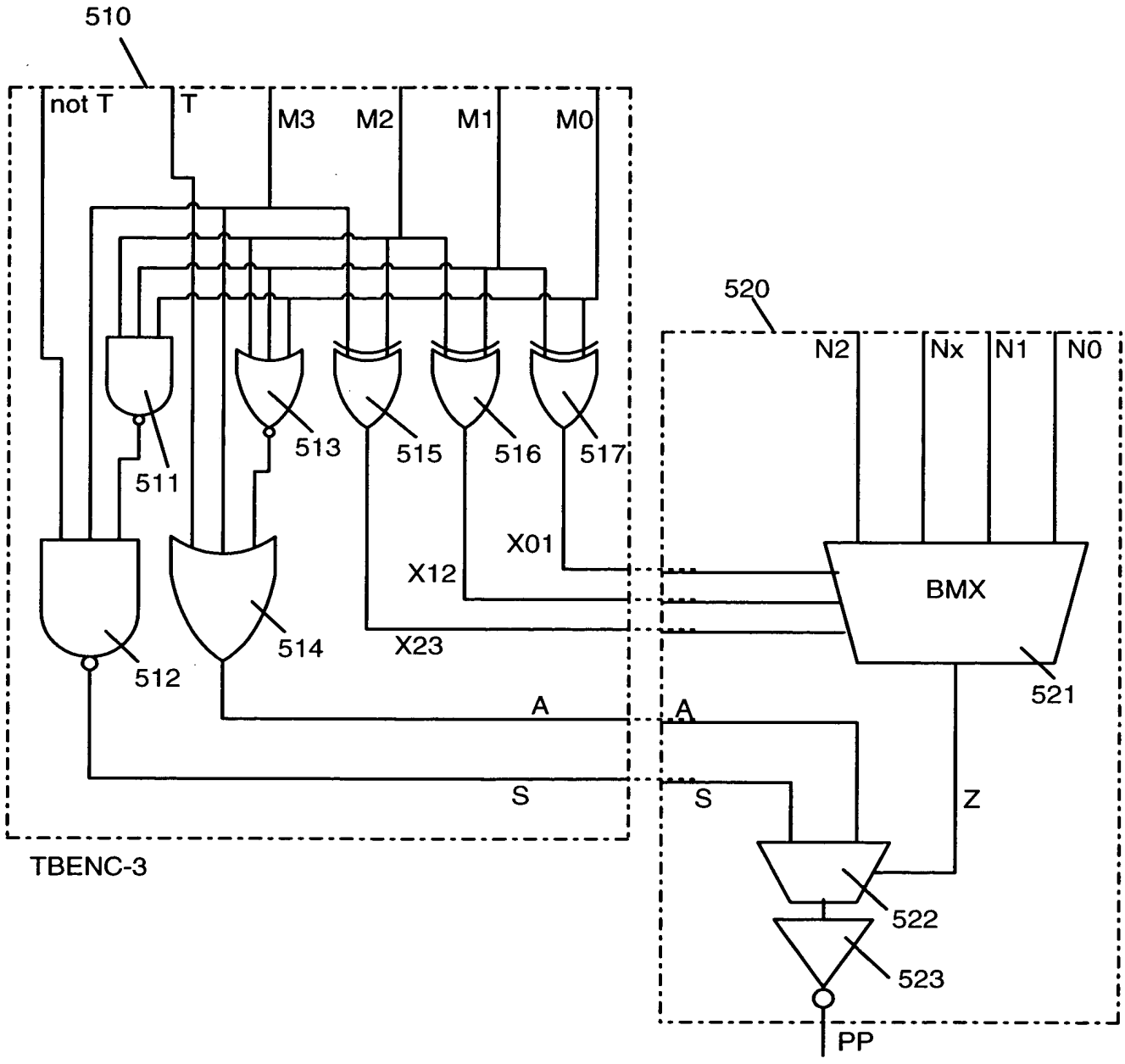
510
not T
T
M3
M2
M1
M0
511
513
515
516
517
X01
X12
X23
512
514
A
S
TBENC-3
520
N2
Nx
N1
N0
BMX
521
A
S
Z
522
523
PP

Figure 11

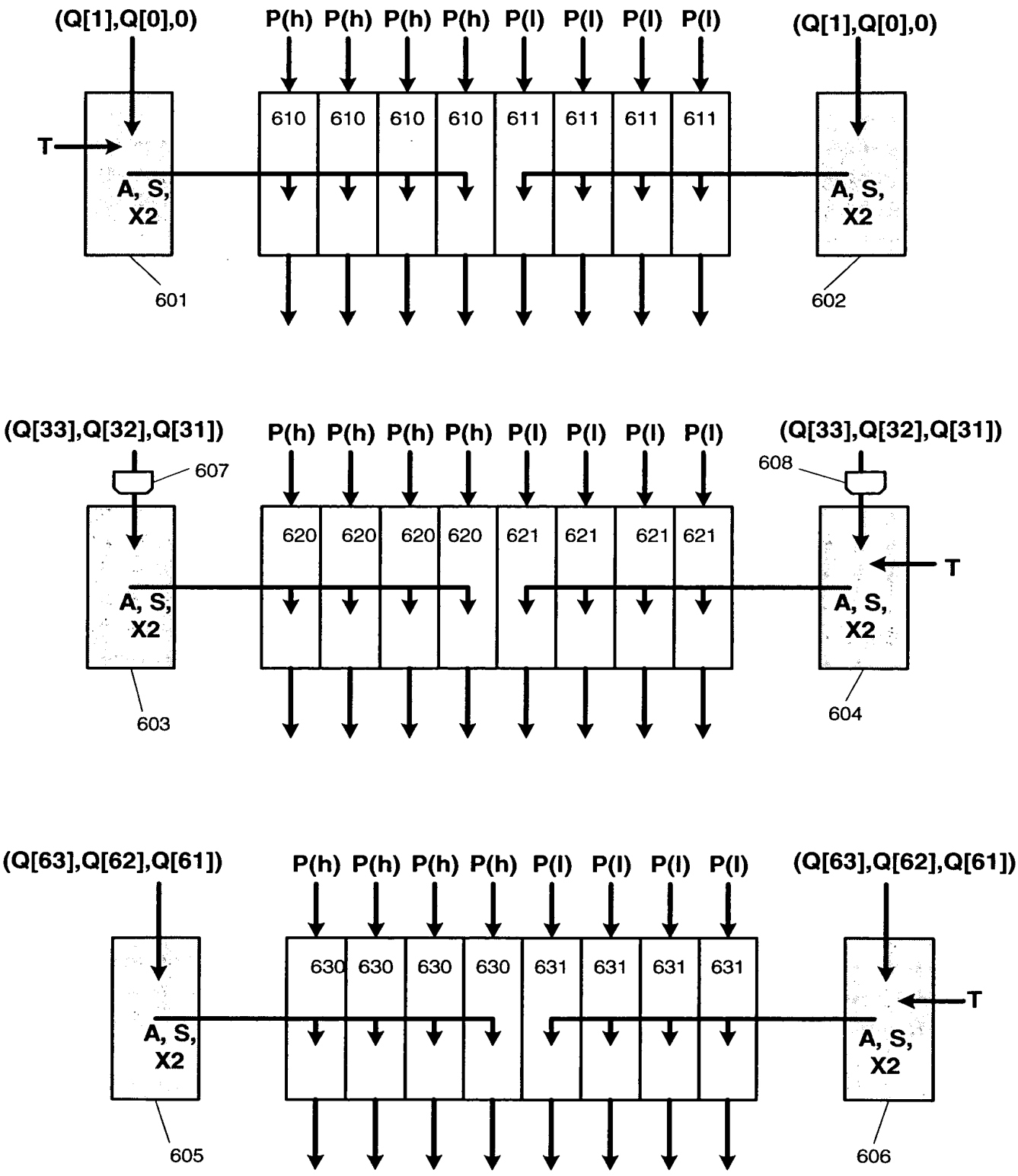
(Q[1],Q[0],0)
P(h) P(h) P(h) P(h) P(l) P(l) P(l) P(l)
(Q[1],Q[0],0)
T
610 610 610 610 611 611 611 611
A, S, X2
A, S, X2
601
602
(Q[33],Q[32],Q[31])
P(h) P(h) P(h) P(h) P(l) P(l) P(l) P(l)
(Q[33],Q[32],Q[31])
607
608
620 620 620 620 621 621 621 621
T
A, S, X2
A, S, X2
603
604
(Q[63],Q[62],Q[61])
P(h) P(h) P(h) P(h) P(l) P(l) P(l) P(l)
(Q[63],Q[62],Q[61])
630 630 630 630 631 631 631 631
T
A, S, X2
A, S, X2
605
606

Figure 12